

REMARKS

Reconsideration and allowance are respectfully requested.

Claims 1-24 are currently pending.

The specification has been amended to incorporate the proper headings under rule 37 CFR 1.97.

The present invention discloses a stator core of electrical machines. The stator core comprises a number of laminations of low loss stator iron and a lesser number of laminations of high thermal conductivity material. The laminations of high thermal conductivity material transfer and dissipate heat from the stator core (Page 5 lines 9-31). There are a number of different ways to use copper or aluminium or their alloys as the high thermal conductivity lamination components. The high thermal conductivity components may be each of the following:

- High thermal conductivity laminations comprising an electrically insulating and thermally conductive material such as aluminium nitride or silicon carbide (Page 10 lines 23-30).
- High thermal conductivity laminations coatings applied to the laminations of the low loss stator iron (Page 7 lines 7-10).
- High thermal conductivity laminations comprising an adhesive or resin or other matrix which is loaded with a high thermal conductivity material (Page 10 lines 30-32).
- High thermal conductivity laminations comprising carbon fibres or carbon nanotubes, exfoliated graphite, carbon fullerene or other high conductivity forms of carbon (Page 7 lines 25-28).

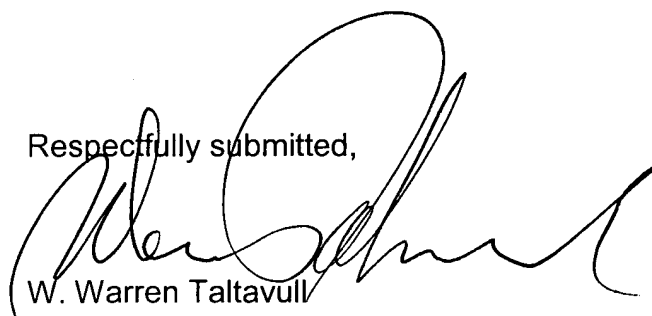
Futhermore, the high thermal conductivity coatings may be provided with an insulating coating of copper oxide or aluminium oxide (Page 7 lines 15-24).

JARCZYNSKI (EP0461906) discloses a stator core comprising core laminations 34 coaxially stacked with more highly thermal conductive laminations 36 which are interposed between preselected adjacent pairs of core laminations at selected axially spaced locations (Column 5 lines 48-53). The thermal collector 26 comprises copper or aluminium and the highly thermal conductive laminations 36 may be aluminium (Column 6 lines 33-49). JARCZYNSKI does not disclose both applying coatings to the laminations of the low loss stator iron assembly as claimed in amended claim 1 and any of the high thermal conductivity components bulleted above and therefore does not anticipate the present invention.

We have amended claims 1, 2, 4, 8 and 17 to include the language illustrated above. New claims 25-30 include the other possible high thermal conductivity components with reference to claim 1 as discussed above. Similarly, new claims 31-36 refers to amended claim 18 and includes the other said possible high thermal conductivity components. New claim 37 claims the high thermal conductivity laminations comprising carbon nanotubes, which is deleted in amended claim 8. Claims 2, 5, 6, 7 and 16 have been cancelled.

Entry of this amendment is solicited, is believed appropriate, and is believed to distinguish the invention from the cited references. For the foregoing reasons, reconsideration and allowance are believed in order and are solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'W. Warren Taltavull', written over the typed name.

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